

(54) MINIMUM MICRO CELL SYSTEM

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**PURPOSE:** To realize a cellular zone system superior in a spatial frequency utilization ratio in a low cost by directing at least one null radiant point in a base station antenna radiant pattern in a direction along a road so as to form a radio communication zone.

**CONSTITUTION:** A base station antenna 4 is fitted to a radio equipment main body 5 or a telephone box 6 and it is installed considerably lower than the height of a peripheral building 8. The null point 12 within the vertical surface of the antenna 4 is directed in a horizontal direction and a main beam 11 is directed to be lower than a horizontal direction. The azimuth direction directivity of the antenna 4 has even omni-directivity. Namely, directivity that a first null point 12 coincides with the horizontal direction when the main beam 11 is tilted downward by 30 degrees from the horizontal direction is realized. Thus, interference given to the remote adjacent base station in the direction along the road can be reduced.

